



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

Hearing on "Discharges Incidental to the Normal Operation of a Commercial Vessel"
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Committee on Transportation and Infrastructure

Testimony of Andrew Fisk, Ph.D.
Bureau Director, Land & Water Quality
Maine Department of Environmental Protection

While the committee further discusses how to handle amendments to the Clean Water Act regarding vessel discharges, I would like to briefly outline some work Maine has done in this regard.

Maine has for at least the last two decades developed and implemented a comprehensive strategy to improve the quality of our coastal waters to meet the requirements of both the Clean Water Act and our own ambitions to build a vibrant economy around a healthy environment. Since 1989 the state of Maine and coastal municipalities have invested over \$118 million dollars to meet our combined sewer overflow (CSO) plans. With fully 100% of our communities statewide having approved and enforceable CSO control plans, we have reduced the annual volume of CSO discharges in Maine by almost 70%. We have replaced thousands of failing septic systems and removed many outdated small-scale treatment systems with millions of dollars of voter-approved state grants. One result of all this work is that we have opened thousands of acres of shellfish beds for commercial harvesting that had been closed for years, if not decades.

As well, we have invested significantly in the improvement of our ports and harbors, either by installing sewage pump-out stations at marinas along the coast or rebuilding commercial ports and piers to increase capacity for cruise ships – whether it is the 90-passenger American Eagle or the Queen Mary II – which are increasingly coming to see Maine's beauty. The city of Portland just invested over \$20 million in the first phase of port improvements to allow for passenger vessels up to 1,400 feet long to berth shoreside.

Maine's economy continues to have very strong natural resource and tourism sectors. In 2006, the value that our over 2000 shellfish harvesters along with dozens of oyster and mussel farmers brought to the economy was in excess of \$29 million in direct labor income and over \$56 million in total economic impact.¹ Much of this takes place in our poorest counties which are located in the easternmost part of the country, or what you've heard called "Downeast." You well know these jobs depend on clean water. Based on economic research sponsored by the International Council of Cruise Lines, the cruise ship industry supported over 400 jobs and \$12 million in payroll in Maine in 2006, where port calls have more than doubled in the last several years.²

I mention this work to put a frame around our recently enacted general permit program for large commercial passenger vessels that regulates the discharge of both gray and black water to practical and achievable standards. Our state legislature has extensively studied and debated how to include commercial passenger

¹ Athearn, James. 2008. *Economic Value of Maine's Shellfish Industry*. University of Maine, Machias.

² CLIA. 2006. *2006 Economic Primer - The Cruise Industry: A \$35.7 billion Partner in U.S. Economic Growth*. Found at <www.cruising.org>

vessels in our overall strategy for coastal water quality. In 2005 we embarked on a two part strategy; the first to implement targeted no-discharge areas in harbors along our coast, the second to craft a general permit for cruise ships with more than 250 passengers. The basis of the general permit rested on our understanding of the effluent characteristics of cruise ships. In 2001 and 2002 Alaska conducted effluent and ambient monitoring of cruise ships several years before our program was developed. We not only know that cruise ships can discharge large volumes of treated wastewater (either gray, black, or a combination) because of the number of passengers they carry, but that the treatment standards of the installed marine sanitation devices in many ships are not as protective as what we ask our municipal treatment plants to meet. For example, monitoring data from Alaska showed that for conventional pollutants cruise ships were discharging up to ten times what a typical municipal treatment plant is permitted, and in some instances many thousands of times more bacteria. What Alaska found was that cruise ships that had typical marine sanitation devices were not always performing to the technology standards associated with these devices. There are, however, advanced treatment systems that can meet the appropriate standards, and these have already been installed on some vessels.

This information and more detail is contained in a 2003 report that my department wrote for the Maine legislature, which is available at www.maine.gov/dep/blwq/topic/vessels/report.htm. I would be happy to provide a copy to the committee if that is helpful.

So the end result for Maine, based on these several years of work, was that we were convinced the potential environmental impact from unlicensed cruise ship effluent discharges was significant, that applying comparable standards for municipal effluent limitations would be appropriate, and that we needed verification that standards were being met when large cruise ships were in Maine waters. This meant promulgation of four pages of rules for cruise ship discharges with standards familiar to everyone in the wastewater community for the last 30 years – biological oxygen demand, total suspended solids, and residual chlorine. These standards are referenced in an eight page general permit where you get your permit coverage in 14 days for an annual fee of \$117. Coverage is for five years as long you report a certification each year stating conformance with data quality, monitoring, and reporting procedures.

In short, large commercial passenger vessels can easily do their part to maintain and improve the quality of Maine's picturesque and highly productive coastal waters without a cumbersome permitting process.

In closing, I would like to briefly mention that my department is also working cooperatively with our marine resources department and the commercial herring fishery to create a permitting framework for the offloading of herring. Herring is used as bait in the lobster fishery and is landed at numerous ports and harbors along the coast. As a result of several verified complaints of significant discharges of blood, scales, and fish, our two departments evaluated the current off-loading practices and will be working directly with the fishery this fall (once they come off the water) to develop best practicable treatment strategies that consider appropriate screening, the location of discharge pipes below the waterline, and discharging only on outgoing tides. We believe we can find appropriate standards to govern these discharges also using a general permit under NPDES.

Thank you for the opportunity to discuss these issues with you today. I would be happy to answer any questions you may have.